

Nuclear Weapon Development and Nuclear Power in Japan

The nuclear weapon material and the meaning of “nuclear option”

吉田 央 (東京農工大学)

YOSHIDA, Hiroshi (Tokyo University of Agriculture and Technology)

The fact that there is a close relation between nuclear weapon development and nuclear power generation is well known. But the detailed analysis about how the nuclear weapons and the nuclear power generation are related, especially in Japan, hasn't been undertaken so far. In other words, previous researches stated that nuclear power generation is “potential nuclear armament capability” or “nuclear option,” but didn't explain in detail what is the “nuclear option.” This presentation aims to explore the relationship between the nuclear weapon development and the nuclear power generation in Japan, especially by focusing on the amount of nuclear weapon material (high enriched uranium and weapon grade plutonium).

To treat this problem, I'll propose “three tier approach.” The first tier, or “appearance tier,” includes the appearance of nuclear policy in Japan. In this tier, Japanese government repeatedly expresses that they have no intention to develop nuclear weapons. The second tier is “nuclear option” tier. Actually, Japanese government repeatedly examined the possibility of the nuclear weapon development under the appearance of “pacifist nation.” The third tier is “United States global strategy” tier. In the field of nuclear power, Japan needs technical assistance from the United States, Japanese nuclear policy inevitably affected by the United States' attitude. Contrary, both political and economic aspects, the United States also couldn't ignore Japan.

The conclusion of this presentation is as below. The United States supplied the nuclear weapon materials which were easily available to install nuclear weapons. If the Japanese government decides to install nuclear weapons, they could obtain it in short days using materials supplied from the United States. This is the true meaning of “nuclear option.” Of course, these nuclear weapon materials ostensibly weren't supplied for nuclear weapons. They were supplied for “peaceful purpose,” i.e. research of nuclear fuel recycling. There are the dynamic interrelationships between these three tiers.

By the way, Japan returned to the United States in 2016 the nuclear weapon materials which had been supplied from the United States. Now, even if Japanese government wants nuclear weapons, they can't install it. Therefore, we can say that “nuclear option” of Japan has been almost lost.